## PATENT ABSTRACTS OF JAPAN

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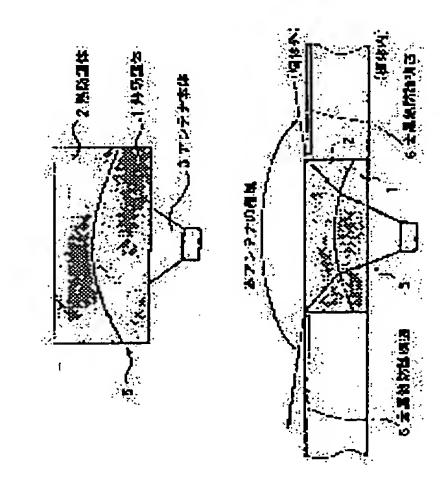
## (54) WIDE RANGE COVERING HEAT RESISTANT ANTENNA

## (57) Abstract:

PURPOSE: To improve heat resistance, to easily realize wide range coverage, and to miniaturize a device by providing a heat protective body with high refractive index of electromagnetic wave and heat resistance at an antenna main body, and providing the heat protective body with low refractive index of electromagnetic wave and high heat resistance at a plane at an opposite side.

CONSTITUTION: First and second heat protective bodies

1 and 2 with heat resistance are mounted at the antenna
main body 3, and the heat protective body 1 is formed in
shape of concave lens and the heat protective body 2 in
shape of concave lens. The heat protective body 1 is
comprised of silica with a high refractive index of
electromagnetic wave, etc., and the heat protective body 2
of the one with a low refractive index of electromagnetic
wave. The electromagnetic wave 5 radiated from the
antenna main body is extended at a wide angle at the
interface of the heat protective bodies 1 and 2, and
furthermore, it is diffused at the interface between the heat
protective body 2 and an external space, then, is radiated to the external space.



## LEGAL STATUS

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 Heat-resistant antenna for space shuttle vehicle - has lamination of heat proofing layers differing in refractive index NoAbstract Dwg 1/4

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